

CLAIMS

1. A Fresnel lens sheet for a rear projection screen that is used in combination with a single light source, comprising:

a substrate sheet, and

a Fresnel lens part formed on the substrate sheet,

the relationship between the haze value H (%) and the thickness T (mm) of the Fresnel lens sheet, measured at the center of the Fresnel lens part, fulfilling the following expression 1:

$$H \geq 3.15T^3 - 23.6T^2 + 63.8T - 20.5 \quad \cdots \quad 1.$$

2. The Fresnel lens sheet according to claim 1, wherein the substrate sheet contains a diffusing agent and the haze value H (%) is determined by this diffusing agent.

3. The Fresnel lens sheet according to claim 1, wherein the surface of the Fresnel lens part has irregularities, and the haze value H (%) is determined by these irregularities.

4. The Fresnel lens sheet according to claim 1, wherein the substrate sheet surface opposite to that on which the Fresnel lens part is present has irregularities, and the haze value H (%) is determined by these irregularities.

5. The Fresnel lens sheet according to claim 1, including at least one of the following three means: (1) a means of a diffusing agent incorporated in the substrate sheet, (2) a means of the Fresnel lens part having on its surface irregularities, and (3) a means of the substrate sheet having on its surface opposite to the Fresnel lens part irregularities, the haze value H (%) being determined by (1) the means of the diffusing agent contained in the substrate sheet, (2) the means of the Fresnel lens part having irregularities or (3) the means of the substrate sheet having irregularities.

6. A rear projection screen that is used in combination with a single light source, comprising a Fresnel lens sheet for deflecting light rays from

a single light source to make them nearly parallel to each other, and a light-diffusing sheet for controlling the viewing angle by diffusing the light rays that have been made nearly parallel to each other by the Fresnel lens sheet,

the Fresnel lens sheet comprising:

a substrate sheet, and

a Fresnel lens part formed on the substrate sheet,

the relationship between the haze value H (%) and the thickness T (mm) of the Fresnel lens sheet, measured at the center of the Fresnel lens part, fulfilling the following expression 1:

$$H \geq 3.15T^3 - 23.6T^2 + 63.8T - 20.5 \quad \cdots 1.$$

7. The rear projection screen according to claim 6, wherein the substrate sheet contains a diffusing agent, and the haze value H (%) is determined by this diffusing agent.
8. The rear projection screen according to claim 6, wherein the surface of the Fresnel lens part has irregularities, and the haze value H (%) is determined by these irregularities.
9. The rear projection screen according to claim 6, wherein the substrate sheet surface opposite to that on which the Fresnel lens part is present has irregularities, and the haze value H (%) is determined by these irregularities.
10. The rear projection screen according to claim 6, wherein the Fresnel lens sheet includes at least one of the following three means: (1) a means of a diffusing agent incorporated in the substrate sheet, (2) a means of the Fresnel lens having on its surface irregularities, and (3) a means of the substrate sheet having on its surface opposite to the Fresnel lens part irregularities, the haze value H (%) being determined by (1) the means of diffusing agent contained in the substrate sheet, (2) the means of the Fresnel lens part having irregularities, or (3) the means of the substrate sheet having irregularities.